
Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2011; month=1; day=20; hr=16; min=21; sec=33; ms=563;]

Validated By CRFValidator v 1.0.3

Application No: 10586080 Version No: 2.0

Input Set:

Output Set:

Started: 2011-01-10 17:21:13.762

Finished: 2011-01-10 17:21:15.298

Elapsed: 0 hr(s) 0 min(s) 1 sec(s) 536 ms

Total Warnings: 33

Total Errors: 0

No. of SeqIDs Defined: 34

Actual SeqID Count: 34

Error code		Error Description	1								
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(1)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(2)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(3)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(4)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(5)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(6)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(7)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(8)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(9)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(10)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(11)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(12)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(13)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(14)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(15)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(16)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(17)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(18)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(19)
W	213	Artificial o	r	Unknown	found	in	<213>	in	SEQ	ID	(20)

Input Set:

Output Set:

Started: 2011-01-10 17:21:13.762 Finished: 2011-01-10 17:21:15.298

Elapsed:

0 hr(s) 0 min(s) 1 sec(s) 536 ms Total Warnings: 33

Total Errors: 0

No. of SeqIDs Defined: 34

> Actual SeqID Count: 34

Error code **Error Description**

This error has occured more than 20 times, will not be displayed

SEQUENCE LISTING

<110>	Ark Therapeutics Limited	
	Ahlroth, Mervi	
	Schenkwein, Diana	
	Airenne, Kari Juhani	
	Yla-Herttuala, Seppo	
	Laitinen, Olli	
<120>	Integrase Fusion Proteins and Their Use with Integrating Gene	
	Therapy	
<130>	GJE.7664	
<140>	10586080	
	2011-01-10	
\141 /	2011-01-10	
<150>	PCT/GB2005/000115	
	2005-01-14	
(131)	2005 01 11	
<150>	GB0400814.0	
<151>	2004-01-14	
<160>	34	
<170>	PatentIn version 3.3	
<210>	1	
<211>	31	
<212>	DNA	
<213>	Artificial	
<220>		
<223>	Primer	
<400>	1	
ccttaat	ttaa atgtttttag atggaataga t	31
<210>	2	
<210>	26	
<211>	DNA	
<213>	Artificial	
\Z13/	ATCITICIAL	
<220>		
<223>	Primer	
<400>	2	
gctctag	gaat ceteateetg tetaet	26
<210>	3	
<211>	41	
<212>	DNA	

<213> Artificial

```
<220>
<223> Primer
<400> 3
tatggcctct caggccatta ttaatcctca tcctgtctac t
                                                                    41
<210> 4
<211> 31
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 4
                                                                    31
attcaccact agtgctccaa aaaaaaagcg c
<210> 5
<211> 41
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 5
                                                                    41
tatggcctct caggccatta ttataccaca aagtgactgc c
<210> 6
<211> 36
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 6
ggggaccact ttgtacaaga aagctgggtt atggcc
                                                                    36
<210> 7
<211> 34
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 7
tctcaggcca ttattatacc acaaagtgac tgcc
                                                                    34
<210> 8
```

<211> 36

```
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 8
                                                                    36
ggggaccact ttgtacaaga aagctgggta ttatta
<210> 9
<211> 18
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 9
atcctcatcc tgtctact
                                                                    18
<210> 10
<211> 31
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 10
gggacaagtt tgtacaaaaa agcaggctat g
                                                                    31
<210> 11
<211> 54
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 11
                                                                    54
catcaccatc accatcacct ggtgccgcgc ggcagctttt tagatggaat agat
<210> 12
<211> 18
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 12
ggggaaagaa tagtagac
                                                                    18
```

```
<210> 13
<211> 21
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 13
                                                                    21
gccacacaat catcacctgc c
<210> 14
<211> 19
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 14
                                                                    19
attaaccctc actaaaggg
<210> 15
<211> 19
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 15
aatacgactc actataggg
                                                                    19
<210> 16
<211> 22
<212> DNA
<213> Artificial
<220>
<223> Primer
<400> 16
                                                                    22
caatcaaagg agatatacca cg
<210> 17
<211> 20
<212> DNA
<213> Artificial
<220>
```

<223> Primer

<400>	17	
tcgacc	tgca ggcgcgcga	20
<210>	18	
<211>	15	
<212>	DNA	
<213>	Artificial	
<220>		
<223>	Primer	
<400>	18	
	taag gtagc	15
00000	caay geage	
<210>	19	
<211>	15	
<212>	DNA	
<213>	Artificial	
<220>		
<223>	Primer	
. 100	10	
	19	15
getaee	ttaa gagag	13
<210>	20	
<211>	33	
<212>	DNA	
<213>	Artificial	
<220>		
<223>	Primer	
<400>	20	
ctagta	gtac tgctagagat tttccacagc atg	33
<210>	21	
<211>	25	
<211>	DNA	
	Artificial	
\213/	ALCITICIAI	
<220>		
<223>	Primer	
<400>	21	
ctgtgg	aaaa tctctagcag tacta	25
<210>	22	
<211>	29	

<212> DNA

<213> Artificial

<220>		
<223>	Primer	
<400>	22	
cagtga	atta gcccttccag tactggtac	29
<210>	23	
<211>		
<212>		
<213>	Artificial	
<220>		
<223>	Primer	
	23	29
cagtac	tgga agggctaatt cactgcatg	29
<210>	24	
<211>	27	
<212>	DNA	
<213>	Artificial	
<220>		
<223>	HIV-1 donor DNA substrate	
<400>	24	
	gaag ggctaattca ctgcatg	27
, ,		
<210>	25	
<211>	27	
<212>		
<213>	Artificial	
<220>		
	HIV-1 donor DNA substrate	
<400>	25	
catgac	cttc ccgattaagt gacgtac	27
<210>		
<211> <212>		
	Artificial	
-210/		
<220>		
	HIV-1 donor DNA substrate	
<400>		
catgct	gtgg aaaatctcta gcagtac	27

<210> 27 <211> 27

```
<212> DNA
<213> Artificial
<220>
<223> HIV-1 donor DNA substrate
<400> 27
                                                                     27
gtacgacacc ttttagagat cgtcatg
<210> 28
<211> 180
<212> DNA
<213> Artificial
<220>
<223> Plasmid
<220>
<221> misc_feature
<222> (153)..(153)
<223> n is a, c, g, or t
<400> 28
cccttttcta ttagaaccgg ataacatcaa cggcaaaacg tgcacagcaa gcgcgctatg
                                                                     60
tcataatact cgatgccaca atcccttgca cttgtgctgg gagtcactag acgacaacaa
                                                                    120
aggcagaaac tggtgcccgg gtcccaacgg ggnatgtgtc catgcggtgg tttgtttaag
                                                                    180
<210> 29
<211> 180
<212> DNA
<213> Physarum polycephalum
<400> 29
cccttttcta ttagaaccgg ataacatcaa cggcaaaacc tgcacagcat cgcacctatg
                                                                     60
tcataatact cgatgccaca atcccttgca cttgtgctgg gagtcactag acgacaacaa
                                                                    120
aggcagaaac tggtgcccgg gtcccaacgg gggatgtgtc catgcggtgg tttgtttaag
                                                                    180
<210> 30
<211> 180
<212> DNA
<213> Artificial
<220>
<223> Plasmid
<220>
<221> misc_feature
<222> (55)..(55)
```

<223> n is a, c, g, or t							
<400>	30						
ccctttt	cta ttagaa	ccgg	ataacatcaa	cggcaaaacc	tgcacagcat	cggcnctatg	60
tcataat	act cgatgo	caca	atcccttgca	cttgtgctgg	gagtcactag	acgacaacaa	120
aggcagt	ttg accago	ccgg	gtcccaacgg	gggatgtgtc	catgcggtgg	tttgtttaag	180
<210>	31						
<211>	29						
<212>	DNA						
<213>	Artificial	-					
<220>							
	ELITED						
<223>	5'LTR						
<400>	31						
cagtact	gga agggct	aatt	cactgcatg				29
<210>	32						
<211>	29						
<211>	DNA						
	Artificial						
\ 213>	ALCILICIAL	=					
<220>							
<223>	5'LTR						
< 40.0>	2.2						
<400>	32						29
catggto	catg acctto	eccga	ttaagtgac				29
<210>	33						
<211>	25						
<212>	DNA						
<213>	Artificial						
<220>							
<223>	3'LTR						
<400>	33						
ctgtgga	aaaa tctcta	ıgcag	tacta				25
<210>	34						
<211>	33						
<212>	DNA						
<213>	Artificial						
-							
<220>							
<223>	3'LTR						
<400>	34						
		race+	cgtcatgatg	atc			33
gracyal	out ittag	ayaı	ogicalyaly	ucc			رر